REMARKS

This is in full and timely response to the above-identified Office Action. The above listing of the claims supersedes any previous listing. Favorable reexamination and reconsideration is respectfully requested in view of the preceding amendments and the following remarks.

Rejections under 35 USC § 112

The rejection of claims 8 and 10-12 under 35 USC § 112 first paragraph as being allegedly failing to comply with the written description requirements is traversed. In view of the rejection, in claims 8 and 11, the reference to the insulating layer in connection with the prevention of the diffusion of ions to the alkali-containing glass substrate has been deleted.

In regard to the rejection of claims 8 and 10 under 35 USC 112, second paragraph, claim 8 has been amended such that "even if the insulating film is heated at 550°C for one hour." Namely, this portion has the second meaning.

Rejections under 35 USC § 103

The rejection of claims 8 and 11 under 35 USC § 103(a) as being unpatentable over McCurdy et al. in view of Zieba et al., is traversed.

In this rejection, the claimed electrode film is alleged to "correspond" to the conductive coating which is used in McCurdy et al. However, this coating is disclosed at column 4, lines 44-65 as follows:

> Alternatively, a **conductive coating** may also be applied in an anti-reflective coating stack in conjunction with the coating of the present invention. **A conductive coating would enhance the utilization of the anti-reflective film by**

enabling the coated article to dissipate static charges that can build up on computer **monitor screens**. The conductive coating is **generally applied onto the antimony/tin oxide alloy** prior to applying the metal oxide coating.

Conventional conductive coatings generally recognized within the art may be suitable for use in the present invention. **Conductive metal oxide suitable for use with the invention include compounds selected from the group consisting of indium oxide doped with tin, indium oxide doped with fluorine, tin oxide doped with fluorine, tin oxide doped with antimony (less than 5, and typically 1 to 2 atomic weight percent antimony), zinc oxide doped with aluminum, zinc oxide doped with fluorine, zinc oxide doped with boron, and tungsten oxide doped with fluorine.** The conductive metal oxide is applied at a thickness of about 200 angstroms to about 5000 angstroms. **Preferred conductive coatings include tin oxide doped with fluorine and indium oxide doped** with tin. (Emphasis added)

It is submitted that the hypothetical person of ordinary skill is not going to recognize the McCurdy et al. conductive layer as being an electrode layer *per se* let alone an electrode layer for forming a display panel as required by the claims. It is clear that the use of "electrode" imports meaning beyond that of just a conductive layer or film. Indeed, at the very least, Merriam-Webster Online Dictionary defines "electrode" as: a conductor used to establish electrical contact with a nonmetallic part of a circuit.

However, this is merely a dictionary definition and attention is called to MPEP 2173.02 Clarity and Precision [R-3], wherein it is stated that:

> . . . claim language must be analyzed, not in a vacuum, but in light of:
>
> (A) The content of the **particular application disclosure;**
>
> (B) The teachings of the prior art; and
>
> (C) The **claim interpretation that would be given by one possessing the ordinary level of skill in the pertinent art** at the time the invention was made. (Emphasis added)

and further that:

> The test for definiteness under 35 U.S.C. **112,** second paragraph, is whether **"those skilled in the art would understand what is claimed when the claim is read in light of the specification."** *Orthokinetics, Inc. v. Safety Travel Chairs, Inc.*, 806 F.2d 1565, 1576, 1 USPQ2d 1081, 1088 (Fed. Cir. 1986). (Emphasis added)

It is therefore advanced that the McCurdy et al. reference fails to disclose one of the claimed elements. A conductive oxide layer which is capable of discharging static charges neither discloses nor suggests an electrode layer in the manner which will be understood by a person of skill in the art when taken in light of the disclosure. Note being had at this point that the rejection is made under § 103 and not § 102 which does not demand that the understanding of the hypothetical person of ordinary skill be present.

A further shortcoming of this reference resides in the citation of Zieba et al. More specifically, the Zieba et al. reference is applied because the rejection recognizes that McCurdy et al. does not specifically state that the conductive coating is to be deposited on the SiO_2 film. However, the absence of teachings do not negate the teachings which are in fact found in McCurdy et al.

More specifically, McCurdy et al. discloses (as noted above) that the conductive coating is **generally applied onto the antimony/tin oxide alloy** prior to applying the metal oxide coating - wherein the metal oxide coating is the SiO_2 film. Thus, there is guidance for the hypothetical person of ordinary skill to usually form the conductive coating on the layer formed of antimony/tin alloy oxide and in position which is not only different from that which is claimed but in a position which would be recognized by the hypothetical person of ordinary skill as being impractical for an "electrode" layer. That is to say, note should be had to the fact that tin oxide doped with antimony is disclosed at column 4, lines 57-58, as being one example of a conductive coating - and that forming a tin oxide layer which is doped with antimony, on an antimony/tin oxide alloy layer, is hardly the way to form an electrode layer in a manner that the electrode layer could provide any electrode/controlling function. That is to say, one would not

be inclined to form electrodes in the art to which the claimed subject matter is directed, on a surface which is itself conductive and which will therefore short circuit the electrode function.

A further shortcoming in this rejection resided in that the Examiner has on page 10 of this Office Action, stated that McCurdy et al. "does not specifically state that the conductive coating is to be disposed on the SiO2 film" (emphasis added). True - but this is what is not disclosed and this is therefore not a reason to ignore what is in fact disclosed. What a reference does not "specifically" teach is not available for rejection under either of §§ 102, 103.

What McCurdy et al. do teach is that the disclosed layers are selected to induce destructive interference between multiple reflections. That is to say McCurdy et al. discloses at column 1, lines 43-53 that:

> Anti-reflective coatings on glass are utilized to reduce the surface reflection of optical components and to reduce the reflectance of an interface between optical media with different refractive indices. The reduction of visible reflection is achieved by the principle of optical interference. When light impinges on the air-film, film-film, and film-glass interfaces, a portion of the beam is reflected at each interface. **By proper choice of thin film materials and thicknesses, the individual reflected light beams can destructively interfere thereby reducing the observed visual reflectance.** (Emphasis added)

Therefore, the composition and thickness of the layers in McCurdy et al. are of importance for the sake of destructive interference of reflected rays and any thought of an arbitrary

repositioning of same would have to be tempered with the concern that the desired interference would not be achieved.

To further support the rejection based on what is not disclosed in McCurdy et al., Zieba et al. is cited to suggest the disposition of a conductive coating on the exterior of an article. Indeed, column 7, lines 8 - 22 of Zieba et al. discloses:

> It is also **preferred** to deposit an **electrically conducting layer**, which may also function as the antireflective coating, **on the front viewing surface** of the device to **provide static discharge.**

However, as McCurdy et al. already discloses an antireflection coating arrangement which has a conductive layer, it will be immediately self-evident that this antireflection layer must also be on the exterior of a display (viz., a glass substrate) or the like, in order to provide any antireflective function. It is therefore submitted that teachings of the Zieba et al. reference would amount to nothing more than a redundant suggestion to put an antireflection layer in the same location.

The tenor of the rejection is such as to suggest that Zieba et al. was possibly cited to suggest that the tin oxide layer, which is doped with antimony, and the antimony/tin oxide alloy layer, should not be disposed (solely for the sake of rejection) in the position which is preferred by McCurdy et al. but in a separated manner. Nevertheless, this citation backfires in that, as noted above, both McCurdy et al. and Zieba et al. both disclose anti-reflection coatings, both disclose static discharge arrangements and both dispose these layers on the external surface of a glass substrate. The position that the hypothetical person would be inclined to reposition a layer within the antireflection layer arrangement disclosed in McCurdy et al. in light of the teachings of Zieba et al., is therefore totally without merit.

In addition, the barrier film of the invention prevents diffusion of metal ions of the electrode film into the alkali-containing glass substrate. The antimony tin oxide is a non-conductive, neutral colored film suitable for deposition onto a glass substrate (column 3, lines 32-34). The specific property or characteristic of the barrier film of the invention is not disclosed or utilized in McCurdy et al.

In a nutshell, McCurdy et al. provides an antireflective layer on the external face of a glass substrate. Zieba et al. does the very same thing. The redundancy of the teachings are self-evident as is the fact that these references are not going to establish a *prima facie* case of obviousness in the manner purported in this rejection.

The best possible result which might evolve from the proposed combination of references, would be that the antireflective coatings of McCurdy et al. could be used as the antireflective coating disclosed in Zieba et al. since the teachings of Zieba et al. are not going to be considered by the hypothetical person of ordinary skill for a rearrangement of the layers in McCurdy et al. nor convert the static discharge layer into an electrode film as claimed and disclosed. Nevertheless, this would appear to merely convert McCurdy et al. back into itself.

Incidentally, the subject of the present invention is to provide a glass article capable of exhibiting excellent effect of preventing diffusion of metal ion without a problem of stain by metal colloids. The glass article or the film used in the glass article of the invention does not substantially have coloring agents. On the other hand, in McCurdy et al., the film basically uses the antimony tin oxide mixture with coloring property, and is directed to a glass article with low transmission ratio having an absorbing index more than 0.1. McCurdy is different from the invention in the structure and use.

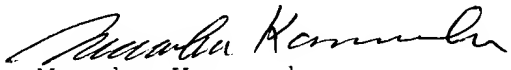
The rejections of claims 8 and 10-12 as being unpatentable over McCurdy et al. and Zieba et al., taken with Nothe (paragraph #8) or Ishikawa (paragraph #9) all suffer from the fatal flaws outlined above, and are all summarily traversed on at least these grounds.

Conclusion

The claims as they stand before the Patent Office are allowable over the art of record for at least the reasons advanced above. The combination of references relied upon are not going to be combined for at least the reasons advanced above, therefore the claims, as they have been amended in this response to obviate the § 112 rejection, are allowable for at least said reasons. Entry of the amendments is therefore courteously solicited along with allowance of this application. Clearly, the issues at hand have all been examined and considered and there are no new limitations which have not been examined.

To refuse entry of the claim amendments proposed in this response as raising new issues would therefore be disingenuous and would result in a meaningless prolongation of the prosecution and pendency of this application. At the very least, entry of the proposed amendments for the sake of appeal is requested.

Respectfully submitted



Manabu Kanesaka
Registration No. 31,467

Customer Number: 32628
1700 Diagonal Road, Suite 310
Alexandria, Virginia 22314
(703) 519-9785 MAN/yok
Facsimile: (703) 519-7769